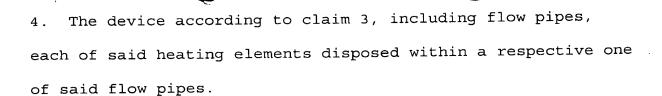
We claim:

- A device for the recombination of hydrogen and oxygen in a gas mixture, comprising:
- a heating chamber;
- a feed line for feeding a gas mixture having a hydrogen content with a parameter characteristic, into said heating chamber;
- a blower connected in said feed line and having a delivery rate; and
- a control unit associated with said blower for adjusting the delivery rate of said blower in dependence on the parameter characteristic for the hydrogen content of the gas mixture.
- 2. The device according to claim 1, including a hydrogen sensor for determining the hydrogen content of the gas mixture, said control unit having an input side connected to said hydrogen sensor.
- 3. The device according to claim 1, including a number of heating elements for heating said heating chamber.



- 5. The device according to claim 1, wherein said heating chamber has a downstream side, and a reaction chamber is connected at said downstream side of said heating chamber.
- 6. The device according to claim 1, including a static mixer connected downstream of said heating chamber.
- 7. The device according to claim 6, wherein the gas mixture has a flow path permitting said static mixer to be heated by a partial stream of the gas mixture heated as a result of a recombination reaction.
- 8. The device according to claim 1, including an internally insulated housing in which said heating chamber is disposed.
- 9. The device according to claim 8, wherein said heating chamber has a downstream side, a splash cooler is connected on said downstream side of said heating chamber, and said splash cooler has a housing directly connected to said internally insulated housing in which said heating chamber is disposed.



10. The device according to claim 1, wherein the parameter characteristic is a measured temperature value of the gas mixture flowing out of said heating chamber.

11. A method for the recombination of hydrogen and oxygen in a gas mixture, which comprises:

feeding a gas mixture through a feed line having a blower into a heating chamber; and

adjusting a delivery rate of the blower in dependence on a parameter characteristic for a hydrogen content of the gas mixture.

- 12. The method according to claim 11, wherein the parameter characteristic is a direct measured value of the hydrogen content.
- 13. The method according to claim 11, wherein the parameter characteristic is a measured temperature value of the gas mixture flowing out of the heating chamber.